



SECRETARY OF THE AIR FORCE  
WASHINGTON

07 NOV 2005

*Bruce*  
MEMORANDUM FOR HQ AFMC/CC

SUBJECT: Instrumentation of Critical Life Areas in Aircraft

One of the lessons we learned, and it even reflected in the latest Analysis of Alternatives we recently received from RAND, is that we do not have sufficient reliability and structural integrity information to determine the correct course of action relative to the future of our aging fleet, with this example being KC-135. Additionally, one of the lessons learned in the stand down of the C-130E's is the uncertainty in reliability and structural integrity in that fleet. This cannot continue, as we continue to cope with an aging fleet across the board.

We have the means and methods for achieving a data driven analysis across our fleet. We have extraordinary fleet reliability experts within our laboratory structure, and extraordinary data analyzers within the test community. We have a great start in that we now have a Fleet Viability Board that will be adjudicating fleet safety as our fleet continues to age. What is needed now is to provide to this board the right information to allow them to best perform their duties for our Airmen.

To accomplish this, Air Force Materiel Command shall establish a plan, and budget, within 90 days to sufficiently instrument our Air Force Fleet either during normal overhaul operations or during initial manufacture, to include fighter, transport, bomber and trainer aircraft. Instrumentation should complement existing Aircraft Structural Integrity Programs. The Air Force Research Laboratory should provide the set of critical reliability measures needed for this plan and the Air Force Test Agency should identify the least expensive approach for the minimum necessary instruments to be installed. Depot operations should be prepared to take actions to life extend the airframes as needed. The plan should contemplate partnering with other Services, as appropriate, to insure maximum benefits are achieved across DOD.

*B. This is what we talked about - a plan to get here and then we can determine how much and when.*  
*Michael Whelan*  
*M/W*